

NEWSLETTER of the Wisconsin Entomological Society

Volume 11, Number 2

Editor: Mark H. Evans

June 1983

Editor's Notes:

Well, it may have seemed uncertain for a while there whether or not spring would ever arrive in Wisconsin, but it appears to have finally flown past into summer. I saw my first black swallowtail butterfly, a male, flying just south of Madison on 15 May but most Papilio polyxenes adults just began appearing about the 6th of June. Last year females were seen ovipositing by the end of the first week of May and Walt Gould even saw a female tiger swallowtail flying in the first week of May last year. As far as I know, the first tigers seen in Dane Co. this year were on 7 June.

As the summer progresses, keep our Newsletter in mind, and don't hesitate to send in notes, thoughts, or observations that you have. This is the perfect format to share things that you've seen as well as provide a record potentially useful to others now and in the future.

We have received some letters with comments about our 1983 planned events and our new Newsletter format and we sincerely appreciate the feedback. We thank all contributors and look forward to hearing from more of you during the coming summer. Have a good season, and look for your next WES Newsletter by October 1983.

Mark H. Evans
240 Russell Labs., UW-Madison
Madison, WI 53706

A Prediction?

A large number of Wisconsin's insect species overwinter here in the state. One wonders if this past winter's mild weather may cause a population boom this summer. My parents have a forsythia bush which normally only has blooms on lower branches that were protected by snow. This year for the first time since it was planted in 1966 the bush sported blossoms all over. Another indicator of the mild weather is high populations of Painted Lady Butterflies (Cynthia cardui). These insects overwinter as adults but generally do not survive in large numbers. There are also quite a few of the other overwintering nymphalid butterflies on the wing. If these indicators can be relied upon, and if the weather doesn't hit any extremes, there should be higher numbers of at least those insects which overwinter in Wisconsin. I look forward eagerly to late May and early June when a large number of insects which hibernate as larvae or pupae begin to put in appearances as adults.

Walt Gould

Past Meetings:

At the February Meeting Dr. Hugh Robertson talked about the "Sex Life of Dragonflies." Eighteen members and guests were present on a snowy winter evening. Dr. Robertson said that males of both damselflies and dragonflies establish territories. The Odonata have also developed some unique methods of copulation and sperm transfer. In the dragonflies, the male holds the female behind the head with 2 pairs of claspers located at the end of his abdomen. The female bends her abdomen forward to receive the genitals of the male. Unusual among insects, the males' organs are on the 2nd abdominal segment--just behind the thorax. In damselflies things work much the same except that the male grasps the female on the dorsal lobe of the prothorax.

Sixteen people were in attendance for the March 8th meeting. Walt Gould gave a breakdown of the six species of checkerspots found in Wisconsin. A majority of species are single brooded and feed on various Aster species. Commonly they overwinter as partly grown larvae, and are often found feeding communally when young. The Silver checkerspot, Baltimore checkerspot and Tawny Crescent are associated with marshy areas. Most species in Wisconsin are on the wing in late May to early June.

Phil Pellitteri spoke to fourteen members and guests at the April 12th meeting. Speaking on "what people really want to know about insects," he gave a breakdown of the types of questions and specimens brought into the Department of Entomology. The more popular problems are carpenter ants, cluster flies, and cockroaches. Tree and shrub insect problems account for almost 50% of the specimens which come into the lab. Among the more unusual problems include cimicids (bed bugs) associated with bats, and mites associated with birds, which occasionally cause biting problems.

Meeting Announcements:

May.....Meeting at the Milwaukee Public Museum
September....."Encounters with arthropods and plants in Costa Rica" by Mark Evans and Bill Warfield
October.....Photo Salon
November.....open and waiting for a volunteer.....
December.....Annual meeting and Christmas Party (location and date to be announced)

(All meetings, except otherwise stated, will be in Room 150, Russell Labs, at the corner of Babcock & Linden, UW-Madison, 7:30 p.m.)

Photo Salon

Regarding the photo salon, see the January, 1983 Newsletter, or contact Bob Jeanne (WES President, Department of Entomology, Russell Labs, UW-Madison, Wisconsin 53706, 608-262-0899).

Upcoming Fieldtrip:

WES Summer Overnight Fieldtrip (Friday evening 15 June-Sun a.m. 17 June):

Sue Borkin has arranged for us to use the UW-Milwaukee Field Station at the Cedarburg Bog from Friday evening through Sunday. There is no charge to us.

Directions:

Take highway I-43 to Hwy. 33 (Saukville) exit. Take Hwy. 33 west to Blue Goose Road (about $2\frac{1}{2}$ miles after Hwy. 33 crosses County Hwy. I). Take Blue Goose Road south $1\frac{1}{2}$ miles. The Field Station is on the west side of the road [3095 Blue Goose Road].

Facilities:

Shower & kitchen facilities, limited number of beds available (bring own bedding, towels).

Habitats:

Include old field, planted prairie, marsh, upland beech/hickory forest, and the Cedarburg Bog.

Food:

Saturday evening potluck: bring a dish to share if you can. We will dip into the Society's funds for hamburgers to grill. If anyone can bring along a grill it will help. For other meals, each is on his/her own.

Come, bring your net, field guides, UV lights, cameras, and share a good time.

Insects in the News (and other notes from the extention office): by Phil Pellitteri

There are various devices on the market that use either light to attract and destroy insects or sound waves designed to drive them away. The one thing they have in common is that they do not do what they promise.

Many insect collectors are familiar with the use of light traps in collecting insects. What about the "Bug Zappers" and mosquito control? It is true that some species of mosquitoes have a moderate attraction to light. However, research has shown that not all species can be collected this way. Last summer we collected various light trap samples in July and August to determine what percent of the insects coming in were mosquitoes and the answer was between .1 and .7%. If these traps were "zapping" the insects, less than one percent of the zaps would be going to the target. If you give a female mosquito the choice between a person in the back yard or the Zapper, I am afraid the person will win (lose?).

What about the sonic devices? Various devices claim to drive away rats, mice, squirrels, bats, roaches and other critters but are supposed to be harmless to people, dogs, or domestic rodents (including pet rats). These are often advertised in places such as the Wall Street Journal, or other reputable publications. Again research has shown that most of these devices are ineffective. Some bat control has been achieved with some devices, but that's it. The sounds that insects respond to would be extremely irritating to people, and would tend to drive everyone away.

It's too bad that these devices do not work, but it's just a fact of life. On word of caution--if your neighbor has bought one before asking your advice, be diplomatic. Some people find the sound of the electric bug killer to be satisfying. They think they are getting back at the little devils.

A Fieldtrip Report (another one on Costa Rica):

In the January, 1983 Newsletter, Bob Jeanne told you a little about Costa Rica in general and also about some of the work that he and Holly Downing had done last fall on social wasps in Guanacaste in the north west part of the country. This past March, Bill Warfield, a new WES member from Madison, Wisconsin, and I, were also in Costa Rica, having working, entomologically-oriented vacations. We thought you would enjoy hearing a little about what we did.

We did not get up to Guanacaste Province but we did cover a lot of ground, see a lot of impressive areas, and collect a lot of insects. After our arrival flight to San Jose in the central valley of Costa Rica, we spent a couple of days getting money changed, visiting the National Museum, and meeting up with a few people to check directions and get information. We saw L. Fernando Jeron (a UW graduate who returned home to Costa Rica with his family over a year ago) and had a brief visit to the Un. of C.R. We also met Richard Hesterburg whom I had met about 6 years ago in Cincinnati. He moved to Costa Rica about 5 years ago so he could devote more time to collecting butterflies. We also had the chance to shake hands with Dan Jansen who had stopped into the museum to check identification on some sphinx moths that he had collected. That was exciting. We all have are heros.

Then we met up with Allan Young from the Milwaukee Public Museum. We had planned to meet him and were very fortunate that we did. He was very helpful and gave us a lot of good tips and advice. We then made plans to rendezvous back with him in a few days.

After renting a 4-wheel drive Toyota from Ada rentals, we drove up to Monte Verde (an adventure in itself unless a few hours on a rugged dirt road at 12 mph is old-hat to you) and arrived at the farming area just down the slope west of the National Park at 10 p.m. in a lot of mist and thick fog. We got permission to set up 2 UV lights and operated them until dawn. The diversity and numbers of moths that flew in were really impressive. It just seems impossible to describe our experiences adequately. With the arrival of dawn and the slow dissipation of fog, our surroundings became more and more impressive. The trees were so big, the plants so diverse, and yet there were pastures of holstein cows in many areas nearby. The Quaker dairy community on this west slope below the Park was established about 30 years ago and has clearly had an impact on the area altering the landscape and changing the vegetation. The community has tried hard in recent years, however, to be more conservation oriented and regulate additional timber cutting as well as reduce the destruction of other flora and fauna within their jurisdiction. Many people were very interested in our work and were very helpful to us.

After visiting the Park above, we returned to the settlement and set up camp on the farm of A. Hogue (who told us to be sure and say hello to Dr. Beales back at UW for him). Near our camp, we trapped moths with UV lights for 2 more nights and ran a beetle trap line for Dan Young back at UW. We spent our days doing some general collecting and curating and took a lot of photographs.

When we left Monte Verde we were pretty tired and dirty so we made our way down from the Divide and went over to the port of Puntarenas for a dip in the Pacific and a meal. Then we went back into San Jose to get a decent night's sleep at the Pension de Costa Rica Inn. We left for Moravia the next day. The area near Moravia was like another world. Although we were in Costa Rica near the end of the dry season, the area west of the Continental Divide has a much more marked dry season. Partly for this reason, the western side of the country has been much more thoroughly settled and logged. Intense land use including cattle ranching has then caused erosion to be a significant threat in many areas. It is only more recently

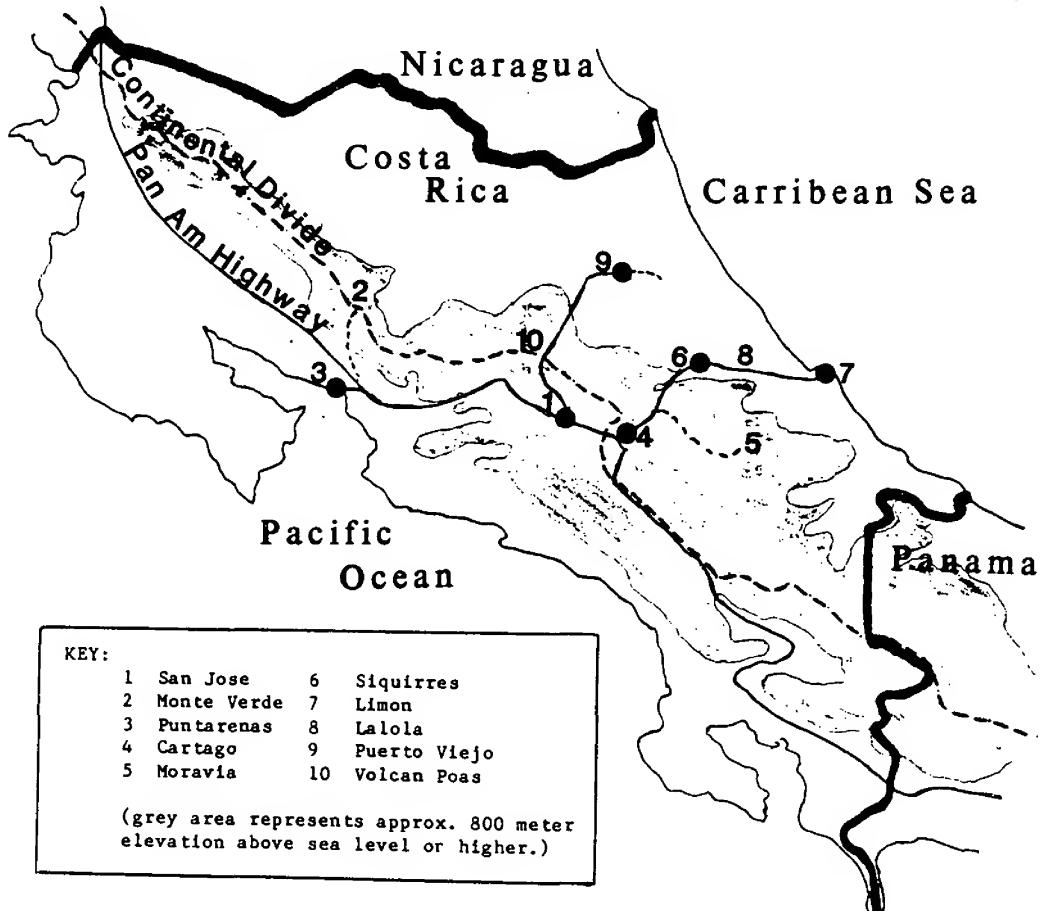
that more extensive timber cutting has been occurring in many areas to the east of the Divide. East of the Divide, although also still in the dry season, has more rain throughout the year and the vegetation shows it. The vegetation, although largely disturbed toward Moravia was so much more lush and green than anything we had seen except at the highest elevations getting up to Mone Verde. Still, whole hill tops we frequently found had been clear cut (and then replanted with tree seedlings of what appeared to be monocultures of one of two tree species).

In fact, there was enough rain that we got our 4-wheel drive stuck. We were above a farming settlement when we slid into an eroded gully in the middle of the road which was up to 18" deep. Some local fellas heard us spinning up there and came up with their village's only tractor, a little Japanese made wide front-axle. They pulled us out, refused payment and thought that this was all great fun and that we were pretty strange. Two of them later visited our camp and watched us collect moths. We camped for two nights on a clear cut hill top which faced

virgin jungle on 3 sides and got different numbers of moths and different species each night. It was an experience that I know neither of us will ever forget.

The next morning, partly out of fear that we would get the truck stuck worse due to continued rain and drizzle, we drove down out of the hills and on to the flat land to the Atlantic port of Limon. After spending the night in an old hotel near the wharf area (and watching "Little House on the Prairie" dubbed in Spanish while we ate supper) we obtained permission to go out onto one of the 3 long piers (each of which can service 3 ships at once) and watch conveyors hurrying cases of bananas onto a Chiquita ship probably bound for New Orleans.

We left the coast and drove back toward Siquirres to the cocoa research plantation at Lalola where Alan Young has one of his study sites for arthropods associated with cocoa pollination. He took us on a tour and introduced us to Alfredo, the plantation manager. We set up a beetle trap line again and were amazed



the number of Hemiptera that we caught. In 2 nights of UV light trapping we were again impressed by the difference between the 2 nights. For example, the first night we caught 12 Megasoma elephas (the big brown sexually dimorphic scarab beetles) but the second night, we caught none.

Lalola was a fascinating place and we planned to spend another day and night there but we heard that active timber cutting of virgin jungle was occurring up north of Porto Viejo. As I especially wanted to get movies of timber cutting to round out part of a photo essay on rain forests that I am hoping to piece together, we decided to drive up there in one marathon day.

We found the logging site but active cutting was briefly discontinued. Since we had to get the truck back to San Jose by 2 p.m. the next day, we camped there overnight and black-lighted and left without getting the photos we hoped for. None-the-less, we were glad we were there. As dawn arrived we could hear 3 different groups of howler monkeys off in the distance as small groups of parrots flew overhead and the strange warbling sounds of Oropendula birds echoed around us every few minutes. Yet around us almost everywhere it seemed, were logging sites and beef pastures recently converted from jungle. Of course, that is why these roads we were driving on were built.

As we drove back up into the mountains to cross the Divide again, we stopped at Volcan Poas, the active volcanic crater which is now a National Park. Although it was quite foggy, what we could see was exciting enough to make us want to come back again sometime. We stopped in the Park's nature education building (which is worth seeing too) and then went back into San Jose and turned in our truck.

Our remaining 2 days we used getting repacked and organized for our return home. We also bought gifts until our money was about gone and acted like urban tourists.

As we left, I think we were both a bit dazed. It was a beautiful and mind expanding trip. Not only had we seen natural areas of breathtaking diversity and color, vibrant with life, but we had also seen the widespread and irreversible destructive impact of human influence in a country struggling to be a leader in tropical conservation; a country also which has 3 times as many people as it had only 18 years ago.

We are looking forward to sharing our experiences with everyone this fall. (See the WES Calandar of upcoming events.)

Mark H. Evans

A Couple of Notes on Sugaring for Moths:

Perhaps the most uncertain way to collect moths is by the use of baiting. This may be performed in a variety of ways. The most popular being the baiting or painting of individual trees. The quick mixture of a 12 oz. can of beer, 2 pounds of brown sugar, and a few dashes of molasses, can be applied within minutes. The results can be very profitable, as I have witnessed nights with 10-12 species of Catocala (Underwings) as well as dozens of smaller noctuid moths on the baited trees.

However, this method can prove to be the most useless of all collecting techniques. At times one can bait 35-40 trees on a perfect trail, with a good tree mixture, on a perfectly cloudy and humid night in mid-summer, and end up with just a few mosquito bites. If you brushed on gasoline, the same results would occur. And unfortunately, my experiences in this type of baiting have failed to produce success in the last two years. Perhaps baiting Lepidoptera has its down cycle every few years, maybe pollution, Mt. Saint Helens ash, or whatever affects the results. It would be interesting to hear from other moth collectors on their views concerning this type of collecting. For me, the attempts will continue as I remember that one large haul several years back.

Jim Parkinson

"Sugaring" for moths is a time honored method of collecting moths, predating blacklighting considerably. Not all species come to baits, but enough do to make it worthwhile. The conditions Jim mentions are those that I have usually found to work best. Sometimes I guess either the moths are not flying, or they are not interested in the bait. My own experience with baits is not great so I can't add too much to Jim's letter. Perhaps some other members will have further comments which may shed some light on this matter. For those interest in baiting or traps, there is an article by Les Ferge on this subject which can be found on pages 10-11 in Vol. 8, No. 2 (Nov. 1980) of the Wis. Ent. Soc. Newsletter.

Walt Gould

Notes and News of Members:

*** Dr. Alan Young of the Milwaukee Public Museum returned from another of his research trips on insects associated in cocoa flower in Costa Rica in April. While down there, he helped out Jay Reed and Sherman Gessert, two reporters from the Milwaukee Journal. They produced the cover story of 15 May's Insight Magazine in the Journal entitled, "The Vanishing Rain Forest." (You should read it.)

*** Bob Murray and Drew Hildebrandt have begun work on the Cicindelidae (Tiger Beetles) of Wisconsin. The following is a list of species reported from the state (? indicates a questionable record):

1. <i>Megacephala virginica</i>	11. <i>C. scutellaris lecontei</i>
2. <i>Cicindela longilabris</i>	12. <i>C. formosa generosa</i>
3. <i>C. hirticollis</i>	13. <i>C. tranquebarica</i>
4. <i>C. duodecimguttata</i>	14. <i>C. punctulata</i>
5. <i>C. repanda</i>	15. <i>C. trifasciata ascendens?</i>
6. <i>C. patruela</i>	16. <i>C. lepida</i>
7. <i>C. sexguttata</i>	17. <i>C. macra</i>
8. <i>C. splendida cyanocephalata</i>	18. <i>C. cuprascans</i>
9. <i>C. limbalis</i>	19. <i>C. puritana?</i>
10. <i>C. purpurea auduboni</i>	

They plan to complete the project this fall and would appreciate additional cicindelid records from the state for these or other species. Bob will be happy to identify cicindelids and answer questions about the project. He can be reached at the Milwaukee Public Museum, 800 W. Wells St., Milwaukee 53233 (414-278-2758). Don't forget to collect specimens for this project during your field trips this season. All contributors will be acknowledged in the paper.

*** If you encounter any bumblebee colonies this summer please contact Mark Evans at 262-3227. He is looking for colonies which can be collected intact and used as live educational displays.

*** While Bill Warfield and I were in Costa Rica in March, we ran a few cantharidin bait trap lines for Dan Young (UW-Madison). The traps collected a number of Hemiptera which Dan sorted and sent off to Dr. Thomas Henry of the U.S. National Museum for us after we returned. Dr. Henry phoned Dan back recently and indicated that the specimens we collected include a few new species and even a new genus of Miridae.

Mark H. Evans

*** Are you looking for a place to get large numbers of insect specimen labels printed? I would recommend one local source which Bill Warfield and I used for specimens we brought back from Costa Rica. Speed Print at 630 West Washington, Ave., Madison, WI (257-5846) did an excellent job for us printing over 1000 copies of each of 9 labels on card stock paper at a total cost of \$40. The labels are just over 1 cm. in length and contain up to 18 letters per line, yet are very clean and legible.

Editor

*** Dr. J. Mark Scriber, et al., would like to mention again that specimens of Papilio glaucus (either sex, living or dead, ... but beat, living) are needed in an ongoing NSF funded research project. (Accurate collection data is, of course, necessary.) Acknowledgements will be made in future publications to all people who donate specimens. Further, all specimens will be permanently stored in the research collection with data labels including the collector's name. (Collecting specimens could be a good project for your local scout groups as Mark Scriber has offered to pay 10¢/specimen out of his own pocket.)

Live wild collected Papilio polyxenes females are also needed by Dr. Mary Berenbaum at the University of Illinois, at Champaign-Urbana. If you can collect any black swallowtails you may also bring them into J. Mark Scriber or Mark Evans in 147 or 240 Russell Labs and they will take care of the shipping.

*** Wisconsin Academy of Sciences, Arts and Letters: As you know the Wisconsin Entomological Society is an affiliate of the Wisconsin Academy, and our members are free to participate in the Academy's activities. The Academy is planning a "Fall Gathering" in Rhinelander on October 7 and 8. The theme is North Country Heritage and will be developed through presentations on a variety of topics including literature, history, folklore, natural resources, and agriculture. Each of you will be receiving an announcement with details by early August.

The Academy reminds us that our members have access to the scholarly publications of the Academy. Contact Bob Jeanne for details.

Treasurer's Report:

Balance in account: 31 December 1982.....\$540.73
Total disbursements (for postage and printing costs)..... 215.59
Total receipts (membership dues) [see below]..... 154.77

1983 Sustaining memberships (donations of \$10.00):
Jim Parkenson

****Balance in account: 15 May 1983.....\$476.13
[Out of our membership of 114, 26 people have paid their 1983 dues so far. Please send in your dues soon to Wisc. Ent. Soc., Dept. of Entomology, Russell Labs., UW-Madison, Madison, Wisconsin 53706.]

New Members:

Bill Hutchison
UW Entomology Dept.

Steve Landry
UW Entomology Dept.

Leroy Lintereur
1428 Mary St.
Marinette, WI 54143

Marion T. Lopina
2134 N. 93rd St.
Wauwatosa, WI 53226

Lawrence and Janet Phelps
Route 1, Box 64
Rocksprings, WI 53961